DESCRIPTION

SUTDENT'S NAME: Sourabh Kumar	
PROGRAM:	**Web design**
DATE:	25/09/2021
TEACHER'S NAME:	Suthakar
COURSE:	**Data Processing Technologies (TTD)**
TYPE OF EXAM:	**Final exam**
DURATION:	**3 hours**
AUTHORIZED MATERIAL:	**None**

OTHER INSTRUCTIONS FROM THE TEACHER

The exam has **XX5** pages including the cover page. In accordance with the syllabus, the evaluation is worth **XX25**% of the final grade.

Penalties imposed on a student accused of an attempt at plagiarism could include, but are not limited to, a grade of 0% for examination or for the entire course. The student could also be either put on probation, suspended and / or expelled from the program.

OTHER INFORMATION

Prepared by : **Jean-Guy Turgeon**

Revised by :   **M.-J. Villeneuve**

Approved by : _____

Good luck !

Question 1   /3
Briefly explain what is an API.

Answer

Application Programming Interface (API) is a software middleman that allows two apps to communicate with one another. You utilise an API every time you use an app like Facebook, send an instant message, or check the weather on your phone.

Question 2   /3
Briefly explain what is a third party API.

Answer

Third-party APIs are JavaScript APIs given by third parties — usually companies like Facebook, Twitter, or Google — that allow you to access and utilise their functionality on your site. Using mapping APIs to display custom maps on your pages is one of the most obvious instances.

Question 3   /3
Give an example of a brower's API.

Answer

Twitter Bots
example of APIs at work is the huge range of **bots** on Twitter. Twitter bots are accounts that automatically tweet (or retweet), follow, and send direct messages based on software instructions. There are *loads* of bots on Twitter, but here are just a few of our favorites:
TinyCareBot: Sends hourly reminders to drink water, stretch, get fresh air, and more.
Grammar Police: Identifies common grammar mistakes made by its followers.
Netflix Bot: Tweets when new content is released on Netflix.
All of these bots are powered by the Twitter API. Aside from allowing you to execute simple actions — like Tweeting a certain phrase or following a user — the Twitter API can also tell bots when something specific happens on the platform. For example, you can ask the Twitter API to tell your bot whenever it receives a new follower. Then, you can program your bot to send a message to that follower using the API.

Question 4

Briefly explain what is a public API.
Answer An open API, often known as a public API, is a software developer-accessible application programming interface. Open APIs are publicly available on the internet and can be freely shared, allowing the owner of a network-accessible business to provide consumers with universal access.

In addition, most significant corporations provide public APIs. An API is essentially a way for a third party to utilise the programming features you've developed. On most websites, you can do things like "like us on Facebook" or "post this to your wall." This is due to Facebook's introduction of a public API. It won't allow you to create your own Facebook app (I tried and failed to create a command line version), but it will allow you to perform some things.

Question 5

What is an endpoint?
(Circle the letter corresponding to your answer)

/3

    a) A computer system linked to a public database.

    b) The final line of an API script closing an external file containing data

    c) The URL of a file containing data.

    d) An AJAX request.(*)

    e) None of the above.

Question 6

/
3

(True or false, circle your answer)
In order to retrieve data from an external file using

JavaScript, it isn't alway mandatory to make an AJAX

request.

TRUE(*)   FALSE

/
3

Question 7

Name the two languages most commonly used
to make data available using an API.
Answer   JSON (JavaScript Object Notation) and XML are the most frequent formats used in current APIs (Extensible Markup Language).

/
3

Question 8

What language is used in the folowwing script example :

```
<container>
        <name>John</name>
        <age>42</age>
</container>
```

Answer this is XML script.

/
3

Question 9

What language is used in the folowwing script example :

```
{
name: "John",
age: "42"
}
```

Answer this is json script

Question 10

/5

Supposing data are gathered in an external file named «mydata.json», write the jQuery instructions needed to display the name in a DIV containing #re-sult as ID (not including the AJAX request).

Data :

```
{
name: "John",
age: "42"
}
```

```
<script type="text/javascript">
$(document).ready(function() {

        $.getJSON("mydata.json", function(wwww) {
$("#result ").html(<h2> wwww.Data.name </h2>);
            });});
</script>
```

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Question 11

Supposing data are gathered in an external file named «mydata.json», write the jQuery instructions needed to display the age in a DIV containing #result as ID (including the AJAX request.

Data :

```
{
users: [
nom: "John",
age: "42"
]
}
```

```
<script language="JavaScript">
$(document).ready(function(){

$.ajax({
        type: "GET",
        url: "mydata.json",
        dataType: "json",
        success: function(xxx){

        var i = 0;

        $(xxx).find('Data').children('users').each(function(){

                var age = $(this).find('age').text();

                $("#result").html(age).appendTo("#results");

});
</script>
```

Question 12

/3

(Circle your answer)
In order to evaluate the number of items contained in an array named
« con-

tainer », how could we proceed?

    a) container[i](*)

    b) find(container).[i]

    c) container.length

    d) $.length.("container")

    e) None of the above